CLAIMS:

1. (currently amended) A catalytic gas turbine comprising:

a compressor receiving an inlet air and producing compressed air;

a catalytic combustor receiving a combustion portion of the compressed air and producing a hot combustion gas;

a turbine receiving the combustion gas; ~~and~~

a flow path conducting a bypass portion of the compressed air around the combustor and turbine~~.~~; and

further comprising a recirculation flow path receiving a recirculation portion of the compressed air and conducting the recirculation portion into the inlet air.

2. (original) The catalytic gas turbine of claim 1, further comprising a bypass metering valve, responsive to a bypass valve control signal, positioned in the flow path for controlling a flow of the bypass portion.

3. (original) The catalytic gas turbine of claim 2, further comprising a controller for generating the bypass valve control signal responsive to at least one of the group consisting of an air-to-fuel ratio in the catalytic combustor, a temperature of a catalyst in the combustor, a temperature of the combustion gas, and the speed of rotation of the turbine.

4. (original) The catalytic gas turbine of claim 1, wherein the compressor comprises stages numbering 1 through N consecutively from a lowest pressure stage to a highest pressure stage, the bypass portion extracted from a stage having a stage number greater than N/2.

5. (cancelled)

6. (original) A catalytic gas turbine comprising:

a compressor receiving inlet air and producing compressed air;

a catalytic combustor receiving a combustion portion of the compressed air and producing a combustion gas;

a turbine receiving the combustion gas and producing an exhaust gas; and

a flow path receiving a recirculation portion of the compressed air and conducting the recirculation portion into the inlet air.

7. (original) The catalytic gas turbine of claim 6, further comprising a recirculation metering valve, responsive to a recirculation valve control signal, positioned in the flow path for controlling a flow of the recirculation portion.

8. (original) The catalytic gas turbine of claim 7, further comprising a controller for generating the recirculation valve control signal responsive to at least one of the group consisting of a temperature of the combustion gas, a temperature of the exhaust gas, a temperature of the inlet air, and a temperature of an ambient air.

9. (original) The catalytic gas turbine of claim 7, wherein the compressor comprises stages numbering 1 through N consecutively from a lowest pressure stage to a highest pressure stage, the recirculation inlet disposed downstream of a stage having a stage number greater than N/2.

10. - 17. (cancelled)